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WO 99/03050 A1 WO 97/41546 A1

(58) Field of Search

UK CL (Edition R) G5C CHA

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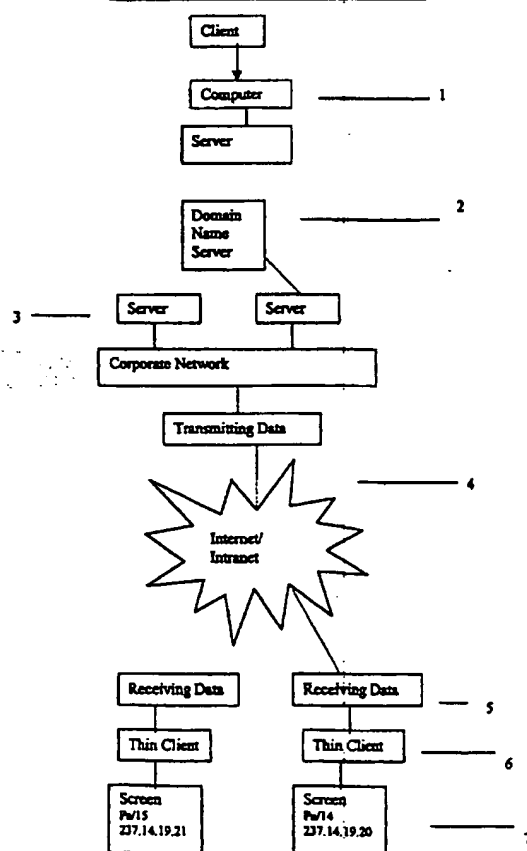
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(54) Abstract Title

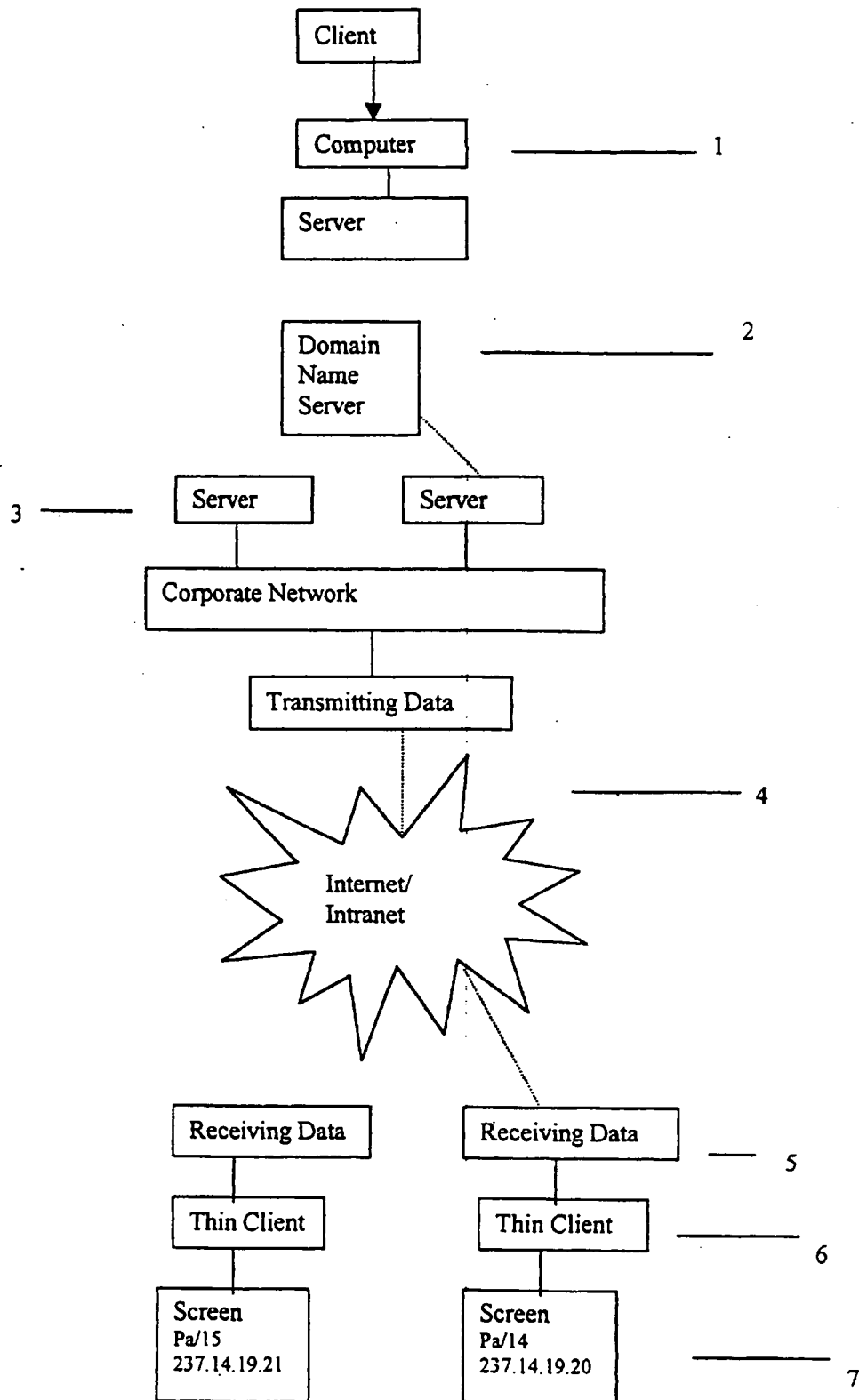
Billboard advertising

(57) Multimedia or static advertisements are distributed to billboards using Internet principles. This is achieved by transposing an Internet protocol address onto each billboard. An electronic billboard network can thus be created for a single company.

Diagram of how the "Web" Board Works



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**Diagram of how the "Web" Board Works**

## Description

**Background to the Problem:** To design and suggest a solution to distribute and deliver advertisements to billboards using the Internet.

**Essential Features:** The main features are that:

- The system can deliver advertisements to different destinations at the same time.
- It can transmit static, and multimedia advertisements.
- The system is based on existing Internet Technology.

**Introduction to the Drawings:** This is based on the diagram showing the process how the advertisements are delivered.

- 1) A person wants to send an advertisement to board Pa/14. Using the client a command link is activated so that the advertisement can be upload to the server ready for the advertisement to be transmitted. The person types in Pa/14 to find the destination for the advertisement on the billboard network, and using IP Multicast Protocol a single data transmission is sent.
- 2) Using the Domain Name System Pa/14 has a unique IP address (237.14.19.20). This finds the server that the board is connected too, so that the advertisement can be delivered to its destination (237.14.19.20).
- 3) The host computer the board is connected to has now been found. To send multiple copies of the advertisement the IP Multicast Protocol replicates the file and delivers the advertisement to the correct host to deliver it to the correct board.
- 4) A data link or data connection is made between the board and the server. The server downloads the advertisement to the board.
- 5) The board receives the data. After the advertisement is sent the data connection is cut. The board is only connected to receive commands from the server via the client. E.g. delete / download / rearrange advertisements.
- 6) The advertisement runs on the thin client controlled by installed software.
- 7) The advertisement is shown on the screen. An oscillator is used to reduce the effects of E.M.R. The screen / thin client may need it's own power supply.

The reasons why a client / sever modal must be used are:

- To send and delete the advertisements simultaneously.
- You can send advertisements to a single / group of boards and to do this multiple connections need to be made at the same time. - (Using Multicast Protocols).
- You can locate an advertisement, and see what advertisements are on what boards.

**Claims**

- The system can deliver advertisements to different destinations at the same time.
- It can transmit static, and multimedia advertisements.
- The system is based on existing Internet Technology.

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Amendments to the claims have been filed as follows

**Amended / New Claims**

- 1) The system can deliver advertisements to different destinations at the same time using IP multicast protocols to use bandwidth effectively.
- 2) It can transmit static, and multimedia advertisements as a result of claim 1.
- 3) The system is based wholly on existing Internet Technology e.g. client /server modal as a result of claims 1-2.
- 4) Wireless technology, based on 3G standards, or HSCD (High Speed Circuit Switching Data), cable, DSL (Digital Subscriber Lines), and satellite that is able to send and receive, video pictures, audio sound, different internet file types, and other multimedia applications maybe used to send data between individual clients (boards), and the server as a result of claims 1-3.
- 5) The advertisements will be shown on a screen using thin screen technology e.g. (LCD, LED, GPD, FED, or LEP) or a screen device for showing holography / 3D / laser pictures maybe used. The screen needs a covering to protect it from the elements and vandalism, as a result of claims 1-4.



Application No: GB 0002335.8  
Claims searched: 1-3

Examiner: Geoffrey Pitchman  
Date of search: 2 May 2000

## Patents Act 1977 Search Report under Section 17

### Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.R): G5C (CHA)

Int Cl (Ed.7): G06F 17/60 G09F 9/00 9/00 9/33

Other: ONLINE: EPODOC WPI JAPIO

### Documents considered to be relevant:

Category	Identity of document and relevant passage	Relevant to claims
X	WO 99/03050 A1 (DAVIDSON)-see abstract	1-3
X	WO 97/41546 A1 (DAHLGREEN)-see abstract and page 27 lines 2-3	1-3

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.